REMARKS

The Examiner has rejected claims 1-5 and 9 under 35 U.S.C. 103(a) as being unpatentable over U.S. Publication No. 2003/0185165 (Ishii et al.) in view of U.S. Patent No. 6,633,554 (Dalal). The Applicant respectfully disagrees.

The Examiner asserts that Ishii discloses a multiple signals receiver configured to receive and process multiple wireless signals in each of a series of time frames, each signal received within a common timeslot S having a unique midamble code of the same communication data. However, as shown in Figure 3 and described in par. 0057 to 0063, Ishii teaches dividing a single time slot into several data blocks, and then processing an estimate of each block. Ishii does not recognize or disclose any processing of multiple user signals, as the Examiner has asserted. Although a joint detection calculator (8) is shown in Figure 12 of Ishii, it is operable on the received signal of a single user following division by block dividing section (1). Further, Ishii discloses eleven examples and states that a noise suppression step is performed by channel estimation of each block, where single user detection, joint detection or RAKE may be used (Par 115-116), but the estimation follows the block dividing step. Thus, joint detection is only suggested as a possible alternative estimation of a slot of data deliberately divided into a plurality of blocks (par. 115), not joint detection of multiple users.

Essentially, Ishii discloses a system and method of improving channel estimation by increasing the signal processing periodic frequency. This is evident when referring to Figure 5 of Ishii, where a single channel estimate for current slot (S2) is shown corresponding to the midamble, whereas the method taught Ishii produces ten channel estimates corresponding to blocks B1-B10. The subsequent Figures and corresponding description include interpolation between current and prior time slot estimates along with threshold considerations. However, none of these methods relate to the claimed invention.

Dalal discloses a system and method for soft handoff of a mobile station from a first base station to a second base station. Dalal's method is driven by the purpose of initiating handoff without waiting for a mobile station message (col. 3 lines 9-10) as the mobile station is still in the process of first accessing the wireless network. The soft handoff method disclosed in Dalal is different than that of the claimed invention.

In contrast, claims 1 and 9 provide a method step of receiving multiple wireless signals from multiple base stations, all within a common timeslot, distinguished by unique encoding. Similarly, claim 4 includes the WTRU (mobile station) having a joint detector receiver configured to receive and process one or more communication data-carrying wireless signals in each of a series of timeframes where each signal received within a common timeslot has a unique

channel encoding of the same communication data. The combination of Ishii and Dalal fail to disclose or suggest two or more base stations transmitting the same communication data in a common time slot to the WTRU, where the WTRU can distinguish the received base station transmissions by a unique coding. Further, the combination of Ishii and Dalal fail to disclose or suggest a joint detector which processes separate channel estimations of multiple base stations, as shown in Figure 6 and described in par. 0050.

Claims 10-15 are rejected as being unpatentable over Dalal in view of U.S. Patent Publication No. 20040/166884 (Oh et al.). The Applicant respectfully disagrees.

Claim 10 includes the limitation: "the new base station and the first base station simultaneously transmitting the same network data in a common timeslot to the WTRU." The combination of Dalal and Oh fail to disclose this claimed limitation. The Examiner has cited col. 10, lines 1-35 of Dalal as the reference for the rejection, however, there is no mention in this passage of a common timeslot containing the same network data from multiple base stations, nor anywhere in either Dalal or Oh.

For the above reasons, Applicant respectfully submits that the presently claimed invention is patentable over the prior art. Reconsideration and allowance of the claims is respectfully requested.

If the Examiner does not believe that the claims are in condition for allowance, the Examiner is respectfully requested to contact the undersigned at 215-568-6400.

Respectfully submitted,

Donald M. Grieco

By _____
Anthony L. Venezia
Registration No. 48,382
(215) 568-6400

Volpe and Koenig, P.C.
United Plaza, Suite 1600
30 South 17th Street
Philadelphia, PA 19103

ALV/slp